

AMENDMENT

U.S. Patent Application No. 09/886,119

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A pneumatic tire comprising a tread portion having a plurality of blocks, each of the blocks having at least one sub-groove ~~formed at a given inclination angle~~ including a central main portion and end portions connecting the central main portion to a circumferential groove, wherein the central main portion is inclined with respect to an equatorial plane of the tire in a direction opposite to a direction of inclination of each of the end portions, ~~wherein a~~ and the central main portion of the sub-groove is formed so that a groove bottom is inclined from a groove opening at an outer surface side of the block in a direction of a main stress applied from a road surface to the block and the end portions of the sub-groove are formed so that the groove bottom ~~is not inclined from the groove opening~~ extends substantially vertically to the outer surface side of the block.

2. (Original) A pneumatic tire according to claim 1, wherein the block is shaped in substantially a quadrilateral form and the central main portion of the sub-groove is extended along a short diagonal of the block.

3. (Currently Amended) A pneumatic tire according to claim 1, wherein the central main portion of the sub-groove is inclined from the groove opening on the surface side of the block toward the groove bottom in a direction ~~opposite to a forward rotating direction~~ extending towards an equatorial plane of the tire.

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4. (Currently Amended) A pneumatic tire according to claim 1, wherein the central main portion of the sub-groove is inclined from the groove opening on the surface side of the block toward the groove bottom in a ~~forward-rotating~~ direction extending away from an equatorial plane of the tire.

5. (Original) A pneumatic tire according to claim 1, wherein the block is shaped into substantially a rhombic form and the central main portion of the sub-groove is arranged so as to extend along a short diagonal of the block.

6. (Original) A pneumatic tire according to claim 1, wherein the central main portion of the sub-groove has an inclination angle of 5-45° with respect to a vertical line drawn to the surface of the block.

7. (Currently Amended) A pneumatic tire comprising a plurality of block rows each containing a plurality of blocks, wherein each block has only one sub-groove, at least a central main portion of [[a]] the sub-groove formed in each block extends in a substantially same direction as a diagonal of the block and is arranged at a position offset from the diagonal, the central main portion of the sub-groove formed in each block of an outer block row when being mounted onto a vehicle is formed so as to incline with respect to a radial direction of the tire in a direction of a side force and a central main portion of a sub-groove formed in each block of an inner block row when being mounted onto the vehicle is formed so as to incline with respect to the radial direction of the tire in a direction of a braking force.

8. (Currently Amended) A pneumatic tire comprising a tread portion having a plurality of blocks, each of the blocks being defined into substantially a quadrilateral form by two pairs of

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main grooves each having a different angle with respect to an equatorial plane of the tire and having a plurality of blocks, each of ~~which~~ the blocks having ~~at least one~~ only one sub-groove ~~crossing with the block~~, wherein at least a central main portion of the sub-groove is arranged substantially in parallel to a diagonal of the block at a position offset from the diagonal.

9. (Currently Amended) A pneumatic tire according to claim 8, wherein the central main portion is arranged so as to offset from the diagonal in a direction ~~opposite to a forward rotating~~ away from an equatorial plane of the tire.

10. (Currently Amended) A pneumatic tire according to claim 8, wherein the central main portion of the sub-groove is arranged so as to offset from the diagonal in a ~~forward rotating~~ direction toward an equatorial plane of the tire.

11. (Previously Presented) A pneumatic tire according to claim 8, wherein when the tire is mounted onto a vehicle, the central main portion of the sub-groove in a first block located in an outer region of the tread in a widthwise direction of ~~a~~ the vehicle mounted with the tire is arranged so as to offset inward from the diagonal in the widthwise direction of the tire and the central main portion of the sub-groove in a second block located in an inner region of the tread in the widthwise direction of the vehicle mounted with the tire is arranged so as to offset from the diagonal toward the forward rotating direction of the tire.

12. (Currently Amended) A pneumatic tire according to claim 8, wherein the sub-groove is arranged at a position offset from the diagonal toward a ~~right~~ side of the tire which is nearest to the block in the a widthwise direction of the tire ~~when mounted onto a left side of a vehicle.~~

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13. (Currently Amended) A pneumatic tire according to claim 8, wherein the sub-groove is arranged at a position offset from the diagonal toward a ~~left side~~ of the tire which is farthest from the block in the a widthwise direction ~~of the tire when mounted onto a right side of a vehicle.~~

14. (Original) A pneumatic tire according to claim 8, wherein the block is substantially a parallelogram form and the central main portion of the sub-groove is arranged substantially in parallel to a short diagonal of the block.

15. (Original) A pneumatic tire according to claim 8, wherein the central main portion of the sub-groove is formed so that the groove bottom is inclined from the surface side of the block in a direction of a main stress applied from a road surface to the block.

16. (Currently Amended) A vehicle comprising:

a first pneumatic tire comprising a tread portion having a plurality of blocks, each of which blocks having at least one sub-groove ~~formed at a given inclination angle~~ having a central main portion and end portions connecting the central main portion to a circumferential groove, wherein the central main portion is inclined with respect to an equatorial plane of the tire in a direction opposite to a direction of inclination of each of the end portions, wherein a and the central main portion of the sub-groove is formed so that a groove bottom is inclined from a groove opening at an outer surface side of the block in a direction of a main stress applied from a road surface to the block and the end portions of the sub-groove are formed so that the groove bottom is not inclined from the groove opening extends substantially vertically to the outer surface side of the block, and wherein the first pneumatic tire is used in a wheel producing a

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traction force as a main stress and the central main portion of the sub-groove is inclined from the surface side of the block toward the groove bottom in the direction of the traction force, and the first pneumatic tire is mounted as a rear tire, and

a second pneumatic tire comprising a tread portion having a plurality of blocks, each of which blocks having at least one sub-groove ~~formed at a given inclination angle~~ having a central main portion and end portions connecting the central main portion to a circumferential groove, wherein the central main portion is inclined with respect to an equatorial plane of the tire in a direction opposite to a direction of inclination of each of the end portions, wherein a and the central main portion of the sub-groove is formed so that a groove bottom is inclined from a groove opening at an outer surface side of the block in a direction of a main stress applied from a road surface to the block and end portions of the sub-groove are formed so that the groove bottom ~~is not inclined from the groove opening~~ extends substantially vertically to the outer surface side of the block, and wherein the tire is used in a wheel producing a braking force as a main stress and the central main portion of the sub-groove is inclined from the surface side of the block toward the groove bottom in the direction of the braking force, and the second pneumatic tire is mounted as a front tire.

17. (Currently Amended) A vehicle comprising:

a first pneumatic tire comprising a tread portion having a plurality of blocks, each of which blocks being defined into substantially a quadrilateral form by two pairs of main grooves each having a different angle with respect to an equatorial plane of the tire and having a plurality of blocks, each of ~~which~~ the blocks having ~~at least~~ only one sub-groove ~~crossing with the block~~,

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wherein at least a central main portion of the sub-groove is arranged substantially in parallel to a diagonal of the block at a position offset from the diagonal, and wherein the central main portion is arranged so as to offset from the diagonal toward a side opposite to a forward rotating direction of the tire, and the first pneumatic tire is mounted as a rear tire, and

a second pneumatic tire comprising a tread portion having a plurality of blocks, each of which blocks being defined into substantially a quadrilateral form by two pairs of main grooves each having a different angle with respect to an equatorial plane of the tire and having a plurality of blocks, each of ~~which~~ the blocks having at least only one sub-groove ~~crossing with the block,~~ wherein at least a central main portion of the sub-groove is arranged substantially in parallel to a diagonal of the block at a position offset from the diagonal, and wherein the central main portion of the sub-groove is arranged so as to offset from the diagonal toward a forward rotating direction of the tire, and the second pneumatic tire is mounted as a front tire.